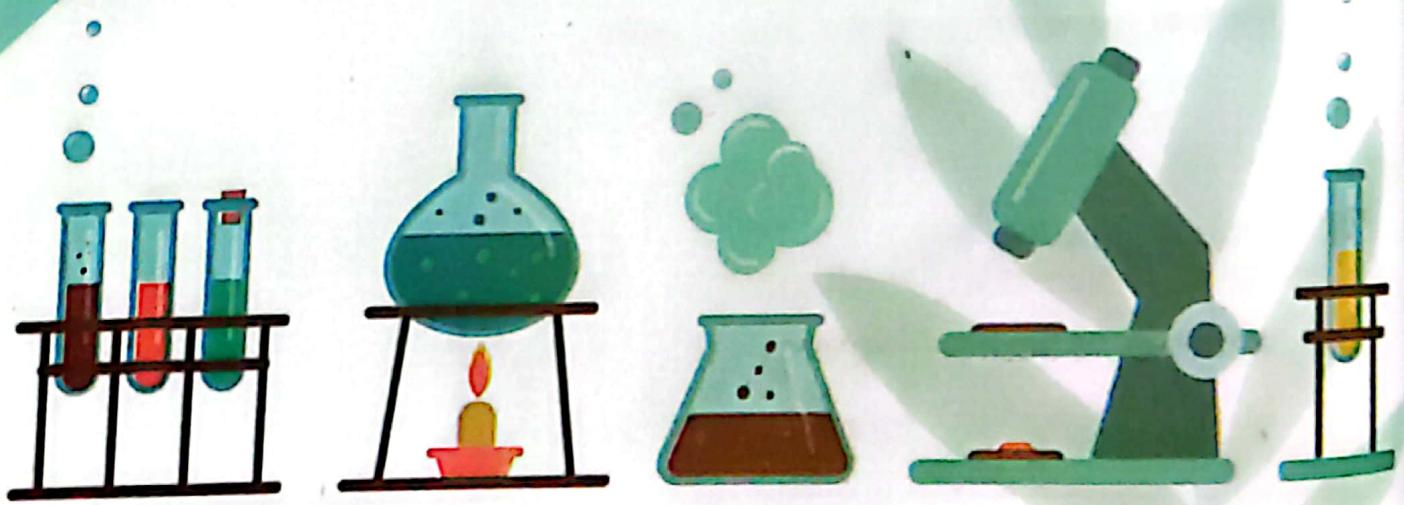


E Model Exam



Model Exam

1

Choose the correct answer:

2 Write the scientific term:

- Write the Suffix**

It is a gas region at the edge of the sun that emits light and heat. (.....)

The input energy in calculator. (.....)

Energy is neither created nor destroyed but it can be changed. (.....)

A heavy steel ball swinging on a cable. (.....)

3 Complete the following:

- ① Spacecraft needs more than months to reach mars.
 - ② Electric iron changes energy to energy.
 - ③ Solar cars are in weight.



④ Batteries store energy and used to ~~create~~

④ **Correct the underline words:**

① Charcoal is made up of grass, corn or wood chips.

② Electric vehicles cause climate changes.

③ Any energy chain ends with the sun.

④ The input energy in the solar cell is electric energy.

⑤ **Mention the input and output energies of the following**



⑥ **What meant by:**

- Renewable source of energy

⑦ **Give reason for:**

- People use machines.

⑧ **What is the importance of:**

- Green house:



Model Exam 2

1 Choose the correct answer:

- ① The amount of is limited on the earth.
 - a. biofuel
 - b. fossil fuel
 - c. a & b
 - d. no correct answers

- ② Modern wind mill is than old wind mill.
 - a. taller
 - b. shorter
 - c. heavier
 - d. no correct answer

- ③ Sound energy is produced from all the following devices except
 - a. Cellular phone
 - b. TV
 - c. Radio
 - d. electric iron

- ④ The correct arrangement for generating electricity by the wind energy is
 - a. Sun – wind – electric lines – wind mills - houses
 - b. Sun – wind – wind mills – electric lines - houses
 - c. Sun – wind mills – electric lines – wind - houses
 - d. Sun – wind mills – wind – electric lines - houses

2 Write the scientific term:

- ① A heavy steel ball swinging on a cable. (.....)

- ② A device used to light houses. (.....)

- ③ The input energy in hand bell. (.....)

- ④ It burns inside car engine to make the car moves. (.....)



3 Complete the following:

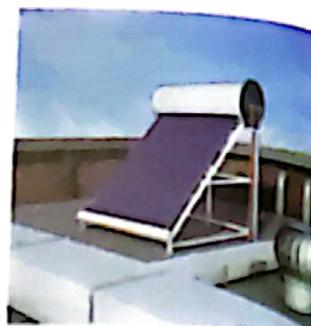
- ① Truck causes damage than the car.
- ② Hair dryer changes energy to energies.
- ③ Solar cars don't cause
- ④ and are non-renewable sources of energy.

4 Correct the underline words:

- ① Solar vehicles need gas stations.
- ② Coal is used to operate the gas oven.
- ③ Any energy chain ends with the sun.
- ④ Kinetic energy is lost during collision.

(.....)
(.....)
(.....)
(.....)

5 The following figure represents a solar heater:



- ① The input energy is
- ② The output energy is
- ③ It is placed on the

6 What's happen when:

- You look directly to the sun for a long time.

7 What is the importance of:

- ① Seatbelt
- ② Dams



Model Exam 3

1 Choose the correct answer:

① The most effective turbine in generating electricity is

a.



b.



c.



d.



② All the following are renewable sources of energy except

a. corn

b. wood

c. petroleum

d. grass

③ Heat energy is in solar heater.

a. consumed

b. produced

c. lost

d. destroyed

④ When a hits a person, he may be injured only and survive.

a. train

b. truck

c. car

d. bike

2 Write the scientific term:

① To get it, it requires removal of forest and cutting tree.

(.....)

② Very tiny organisms, smaller than the head of a pin.

(.....)



- 3 Device used to transfer images and sounds.
- 4 The input energy of the calculator.

3 Complete the following:

- 1 Air bag is made of thin material folded into the steering wheel.
- 2 . and are examples of fossil fuel.
- 3 When a player hits the ball with a bat, the speed of the ball in the direction.
- 4 Batteries store energy and used to operate

4 Correct the underline words:

- 1 The surface of the sun is solid.
- 2 When fuel burns inside a car, the car stops.
- 3 Solar vehicle needs to be charged.
- 4 Electricity transfer to cities through thin wires.

5 Complete the following table:

Device	Input Energy	Output energy
Motor		
Dynamo		



6 What meant by:

- Photosphere

7 Give reason for:

- Petroleum is a non-renewable source of energy.

8 What is the importance of:

① Air bag:

② Fossil fuel:



Model Exam**4****1 Choose the correct answer:**

- 1** The surface of the sun is called

a. sun sphere	b. gaseous sphere
c. photosphere	d. ionosphere

- 2** contains chemical energy.

a. Solar heater	b. Batteries
c. Radio	d. TV

- 3** Ethanol is produced from

a. grass	b. corn
c. coal	d. a & b

- 4** Heat and light energies transfer from space to us in a form of

a. curved lines	b. waves
c. zigzag lines	d. circles

2 Write the scientific term:

- 1** It consists of large number of small solar cells. ()
- 2** The input energy of the calculator. ()
- 3** A heavy steel ball swinging on a cable. ()
- 4** It is the energy produced from burning fossil fuel. ()

3 Complete the following:

- 1** Sun consists of different gases such as an

- 2** produced from the decomposition of algae.
- 3** Solar vehicles don't need or
- 4** Solar energy causes air and wind



4**Correct the underlined words:**

- ① All devices depend on renewable sources of energy. (.....)
- ② The chemical structure of water and petroleum is the same. (.....)
- ③ Charcoal is produced from the decomposition of tree remains. (.....)
- ④ After collision, the air bag inflates fast. (.....)

5**Which figure represents more severe damage and why?**

Figure (1)



Figure (2)

6**What will happen when:**

- When the ball of newton cradle is raised up
-
-

7**What is the importance of:**

- ① Curved mirrors in solar oven.
-
-

- ② T.V
-
-

1 Choose the correct answer:

- 1 Coal is the source of energy in
a. gas oven b. fire place
c. petroleum oven d. solar heater

2 Water of rivers stores great at the top of slopes.
a. Kinetic energy b. Potential energy
c. Electric energy d. Light energy

3 Slow objects cause
a. great damage that can't be repaired
b. great damage that can be repaired
c. small damage that can be repaired
d. small damage that can't be repaired

4 The distance between earth and mars is Million kilometers.
a. 54 b. 55
c. 44 d. 45

2 Write the scientific term:

- ① It is the moment of crashing of two objects together. (.....)
 - ② It is the energy that will not run out faster than consuming it. (.....)
 - ③ Energy neither created nor destroyed. (.....)
 - ④ It is made up of grass, corn or wood chips. (.....)

3 Complete the following:

- 1 Cars stop, when the fuel
- 2 , and are examples of biofuel.
- 3 During collision, The air bag
- 4 The input energy in running is energy

4 Correct the underline words:

- 1 heavy objects always cause damage less than light objects.
(.....)
- 2 Burning of biofuel cause air pollution & global warming.
(.....)
- 3 Increasing the number of blades is better.
(.....)
- 4 dynamo changes electric energy into kinetic energy.
(.....)

5 Choose from the below figures the most effective turbine & the reason:

Figure (1)	Figure (2)	Reason
	



6 **What meant by:**

- Law of conservation of energy

7 **What will happen when:**

- The sun disappears suddenly

8 **Give reason for:**

- Any energy chain starts with the sun.

Model Exam**6****Choose the correct answer:****1**

All of these are examples of renewable source of energy except

- a. solar energy
- b. wind energy
- c. coal
- d. water falls

is (are) example (s) of biofuel.

2

- a. Petroleum
- b. corn
- c. coal
- d. Natural gas

3

..... produces heat and depends on non-renewable source of energy.

- a. Electric heater
- b. Solar heater
- c. Gas oven
- d. No correct answer

4

Robots and vehicles on mars operated by.....

- a. electric charger
- b. long-term batteries
- c. solar panels
- d. b & c

2**Write the scientific term:**

1 It helps farmers planting crops that need hot weather in winter.

(.....)

2 They study flow of Energy in difficult ecosystems. (.....)

3 It burns inside a car engine to make the car moves. (.....)

4 It changes the kinetic energy into electric energy. (.....)

3**Complete the following:**

1 When water of rivers falls from high slopes, potential energy

2 Solar cells change energy to energy.



- ③ cars are light in weight.
- ④ , and are examples of fossil fuel.

4 Correct the underlined words:

- ① Electric vehicles cause climate change. ()
- ② The outcoming energy of battery is chemical energy. ()
- ③ Fossil fuels are extracted from mountains. ()
- ④ Petroleum is an example for biofuel. ()

5 Study the following figure then complete the following:

- ① The boy uses a to hit the ball.
- ② The energy transfer from the to the
- ③ The speed of the ball in in directions.



6 Give reason for:

- We feel warmth of the sun at night.

7 What is the importance of:

- ① Motor
- ② Solar energy



Model Exam**7****1 Choose the correct answer:**

- ① Produced from the decomposition of plants or trees.
- Petroleum
 - Natural gas
 - Coal
 - Benzene
- ② As object's speed increases, Its kinetic energy
- Increases
 - decreases
 - remains constant
 - no correct answer
- ③ Solar heaters are placed on
- streets.
 - markets.
 - bathroom.
 - top of building.
- ④ To make batteries work again, we must
- charge them
 - change them
 - burn them
 - a & b

2 Write the scientific term:

- ① It is a gas region at the edge of the sun that emits light and heat.
(.....)
- ② The main source of fuel. (.....)
- ③ It absorbs the energy of the car during collision. (.....)
- ④ Energy that consumed from solar heater. (.....)

3 Complete the following:

- ① is used in fire place to produce heat energy.
- ② is the energy produced due to friction.



- 3 Solar cars are In weight.
- 4 Fast rubber ball makes sound when it hit by racket than slower ball.

4 **Correct the underlined words:**

- 1 The wind rotates the blades of watermills. (.....)
- 2 Coal is the oldest fuel that used all over the world. (.....)
- 3 A crash investigator sees a car crash as a joke. (.....)
- 4 When fuel runs out, the car moves. (.....)

5 **What is the type of fuel:**



Figure (1)



Figure (2)



Figure (2)

6 **What meant by:**

- Renewable source of energy

7 **How to reduce burning fossil fuel:**

- 1
- 2
- 3



Model Exam**8****1 Choose the correct answer:**

- 1 depends on renewable source of energy.
- Petroleum oven
 - Gas oven
 - Solar cell
 - Flash light
- 2 From the disadvantages of over use of fossil fuel Is (are)
- cutting trees
 - removal of forests
 - air pollution
 - a & b
- 3 used to move things.
- Dynamo
 - Motor
 - Hair dryer
 - electric heater
- 4 The car with speed has the highest kinetic energy
- 100 km/h
 - 80 km/h
 - 60 km/h
 - 40 km/h

2 Write the scientific term:

- 1 The vehicle that doesn't need any fuel or electricity. (.....)
- 2 It is the energy produced from burning fossil fuel. (.....)
- 3 The amount of it on the earth is limited. (.....)
- 4 The incoming energy in electric heater. (.....)

3 Complete the following:

- 1 When two cars collide in the direction, the damage will be less severe.
- 2 is the energy stored in food.



- ③ Coal is used in to produce electricity.
- ④ Heavy objects have energy.

4 Correct the underline words:

- ① The output energy in a calculator is the solar energy. (.....)
- ② When a car hits a boy, he will survive. (.....)
- ③ wood is a non-renewable source of energy. (.....)
- ④ Burning fuel produces light energy. (.....)

5 Arrange the following energy chains from start to end:

- During running:



Chemical energy



Kinetic energy



Solar energy

6 What meant by:

- Solar panels

.....
.....

7 Give reason for:

- When you touch an electric lamp, you feel hot.

.....
.....



Model Exam 9**Choose the correct answer:****1**

1 Modern windmills are than old windmills.

- a. taller
- b. shorter
- c. heavier
- d. no correct answer

2 Heat energy is in electric iron.

- a. consumed
- b. resulted
- c. lost
- d. destroyed

3 is the fuel made of living organisms that can be planted.

- a. Fossil fuel
- b. Biofuel
- c. Petroleum
- d. Gasoline

4 collision, the air bag deflates fast.

- a. Before
- b. During
- c. After
- d. no correct answer

2 Write the scientific term:

1 Vehicles that have batteries must be charged. (.....)

2 A famous game in which the player hits the ball with a bat. (.....)

3 The amount of it on the earth is limited. (.....)

4 It helps farmers planting crops that need hot weather in winter. (.....)

3 Complete the following:

1 It is better to the number of blades inside turbine.



- 2 A spacecraft needs more than Month to reach mars.
- 3 You feel when you approach your hand to the electric lamp.
- 4 The rate of formation of petroleum is than the rate of its consumption.

4 Correct the underline words:

- 1 Motor changes kinetic energy into electric energy. (.....)
- 2 Any energy chain ends with the sun. (.....)
- 3 To get fossil fuel, it requires cutting trees & removal of forests. (.....)
- 4 We must light up electric bulb and electric devices if we don't need it. (.....)

5 Mention the advantages and disadvantages of solar vehicles:

Advantages

.....
.....
.....
.....

Disadvantages

.....
.....
.....
.....

6 What is the importance of:

- Wrecking ball

.....
.....



Model Exam 10

Choose the correct answer:

1

Fast objects cause

1

a. great damage that can be repaired

b. great damage that can't be repaired

c. small damage that can be repaired

d. small damage that can't be repaired

2

The surface of the sun

a. is solid such as moon

b. is gas such as moon

c. isn't solid such as moon

d. isn't gas such as moon

3

Which of the following statements is correct?

a. Energy can't be changed from one form to another.

b. Energy can be changed from one form to another.

c. Energy may be lost or destroyed.

d. Energy can be created.

4

..... is the oldest fuel used all over the world.

a. Coal

b. Wood

c. Petroleum

d. Natural gas



2 Write the scientific term:

- 1 It is the energy that will not run out faster than consuming it. (.....)
- 2 The energy produced due to friction. (.....)
- 3 It is used in cars to keep the driver's body from moving forward during collision. (.....)
- 4 Energy that consumed from hand bell. (.....)

3 Complete the following:

- 1 is used to knock down parts of a building.
- 2 Electricity transfers to cities through
- 3 The wheels of the car when fuel burns inside car engine.
- 4 , and are examples of fossil fuel.

4 Correct the underline words:

- 1 Fuel powered-cars need to be charged. (.....)
- 2 Life continues on the earth in the absence of the sun. (.....)
- 3 Charcoal is made up of grass, corn or wood chips. (.....)
- 4 Burning of biofuel cause air pollution & global warming. (.....)



5 Complete the following table:

Device	Source of Energy	Kind
Flashlight
Solar heater
Fire place

6 Compare between:

Device	Biofuel	Fossil fuel
Type
Importance
Disadvantages
Examples



Model Exams

Model Exam 1

1 Choose the correct answer:

- 1 d 2 c 3 c
- 4 d

2 Write the scientific term:

- 1 Photosphere
- 2 Solar Energy
- 3 Law of Conservation of Energy
- 4 Wrecking Ball

3 Complete the following:

- 1 6
- 2 electric – heat 3 light
- 4 chemical – devices (toy cars)

4 Correct the underlined words:

- 1 Ethanol
- 2 Fuel-powered
- 3 starts
- 4 output

5 Mention the input and output energies of the following:

Figure	Input Energy	Output Energy
Hair dryer	Electric	Heat – Sound – kinetic
Electric lamp	Electric	Light – Heat
Playing football	Chemical	kinetic

6 What is meant by:

- Renewable Source of Energy:
It is the energy that will not run out faster than us consuming it.

7 Give reason for:

- To make their life easier and get tasks done faster.

8 What is the importance of:

- It helps farmers grow plants that need warm weather in winter.

Model Exam 2

1 Choose the correct answer:

- 1 b 2 a 3 d
- 4 b

2 Write the scientific term:

- 1 Wrecking Ball
- 2 Electric Bulb
- 3 Kinetic Energy
- 4 Fuel

3 Complete the following:

- 1 more
- 2 electric – sound – heat – kinetic
- 3 climate changes
- 4 Petroleum – Natural gas

4 Correct the underlined words:

- 1 Fuel-powered
- 2 fireplace

- 3 starts
- 4 transferred
- 5 The following figure shows a solar heater:
 - 1 solar energy
 - 2 heat energy
 - 3 top of the building
- 6 What will happen if you look directly at the sun?
 - Your eyes will be damaged.
- 7 What is the importance of seat belts?
 - 1 It is used to keep people safe from moving vehicles.
 - 2 They can generate power.

Model Exam 3

1 Choose the correct answer:

- 1 c 2 c
- 3 b
- 4 d

2 Write the scientific term:

- 1 Biofuel
- 2 Diatom Alga
- 3 TV
- 4 Solar Energy

3 Complete the following:

- 1 nylon
- 2 Petroleum
- 3 increases
- 4 chemical energy

4 Correct the underlined words:

- 1 Moon



- 3 starts
4 transferred

5 The following figure represents a solar heater:

- 1 solar energy
- 2 heat energy
- 3 top of the building

6 What will happen when

- Your eyes will be damaged.

7 What is the importance of:

- 1 It is used to keep the driver's body from moving forward during collision.
- 2 They can generate clean energy.

Model Exam 3

1 Choose the correct answer:

- 1 c
- 2 c
- 3 b
- 4 d

2 Write the scientific term:

- 1 Biofuel
- 2 Diatom Algae
- 3 TV
- 4 Solar Energy

3 Complete the following:

- 1 nylon
- 2 Petroleum – benzene – coal
- 3 increases – opposite
- 4 chemical energy

4 Correct the underlined words:

- 1 Moon

- 2 runs out
3 Electric
4 huge

5 Complete the following table:

Device	Input Energy	Output Energy
Motor	Electric	
Dynamo	Kinetic	Electric

6 What is meant by:

- It is a gas region at the edge of the Sun that emits light and heat.

7 Give reason for:

- Because it starts to run out as soon as we use it. Also, the rate of our consumption exceeds the rate of its formation.

8 What is the importance of:

1 Airbag:

- a. It slows the speed of the driver when his body moves forward.
- b. It absorbs the energy of the car during collision.

2 Fossil fuel:

- Lighting houses, warming clothes, cooking and operating cars.

Model Answers

Model Exam

4

1 Choose the correct answer:

- 1 c 2 b 3 d
- 4 b

2 Write the scientific term:

- 1 Solar Panels
- 2 Solar Energy
- 3 Wrecking Ball
- 4 Heat Energy

3 Complete the following:

- 1 hydrogen – helium
- 2 petroleum
- 3 electricity – fuel
- 4 movement – blowing

4 Correct the underlined words:

- 1 Some
- 2 different
- 3 Coal
- 4 deflates

5 Which figure represents more severe damage and why?

– Figure (2)

Because the two cars collide in opposite directions.

6 What will happen when:

– The ball stores potential energy and it doesn't have any kinetic energy.

7 What is the importance of:

- 1 To direct the sunrays towards the cooking pans.
- 2 To transfer light and sound.



Model Exam

5

1 Choose the correct answer:

- 1 b 2 b
- 4 a

2 Write the scientific term:

- 1 Collision
- 2 Renewable Source of Energy
- 3 Law of Conservation of Energy
- 4 Ethanol

3 Complete the following:

- 1 runs out
- 2 Corn – grass – wood
- 3 inflates

4 Correct the underlined words:

- 1 more
- 2 fossil fuel
- 3 Decreasing

5 Choose from the figures the most effective turbine & clarify the reason:

– Figure (2), because it is taller than figure (1) & it has 3 blades only.

6 What is meant by:

– Energy is neither created nor destroyed but it is changed from one form to another.

7 What will happen when:

- 1 Plants will wither and die.
- 2 Animals that feed on plants will die.
- 3 Life disappears on the earth.

8 Give reason for:

– Because the Sun is the main source of energy.



**Model Exam 6****Choose the correct answer:**

- 1 b 2 c

Write the scientific term:

- 1 Greenhouse 2 Ecologists 3 Fuel

Complete the following:

- 1 changes to kinetic energy
2 solar-electric
3 Solar
4 Petroleum - natural gas - coal

Correct the underlined words:

- Fuel-powered
incoming
underground
fossil fuel

Study the following figure, then complete the following:

- 1 bat
2 bat-ball
3 increases - different.

Give reason for:

- because the atmosphere envelope, water and soil absorb heat energy from the sun.

What is the importance of:

- 1 It is used to move objects.
2 Planting inside greenhouses
3 Operating irrigation machines
4 Warming houses 5 Cooking
6 Heating water

Model Exam 7**1 Choose the correct answer:**

- 1 c 2 a 3 d
4 d

2 Write the scientific term:

- 1 Photosphere
2 The Sun 3 Airbag
4 Solar Energy

3 Complete the following:

- 1 Coal
2 Heat energy 3 light
4 louder

4 Correct the underlined words:

- 1 windmills 2 Wood
3 puzzle 4 stops

5 What is the type of the fuel:

- Figure (1): Renewable source of energy.
- Figure (2): Non-renewable source of energy.
- Figure (3): Non-renewable source of energy.

6 What is meant by:

- Renewable Source of Energy:
It is the energy that will not run out faster than us consuming it.

7 How to reduce burning fossil fuel:

- 1 Walking or driving a bike instead of driving cars.
- 2 Using public transportsations.
- 3 Turning off electric bulbs and electric devices if we don't need them.



Model Answers



Model Exam 8

8

1 Choose the correct answer:

- 1 c
- 2 c
- 3 b
- 4 a

2 Write the scientific term:

- 1 Solar Vehicle
- 2 Heat Energy
- 3 Fossil Fuel
- 4 Electric Energy

3 Complete the following:

- 1 same
- 2 Chemical energy
- 3 electric power stations
- 4 high

4 Correct the underlined words:

- | | |
|---------|--------|
| 1 input | 2 bike |
| 3 Coal | 4 heat |

5 Arrange the following energy chains from the start to the end:



6 What is meant by:

- Solar panels

They consist of a large number of small solar cells. They change solar energy into electric or heat energies.

7 Give reason for:

- A part of the electric energy changes to heat energy. So you feel hot when you approach your hand to it.

Model Exam 9

9

1 Choose the correct answer:

- 1 a
- 2 b
- 3 b
- 4 c

2 Write the scientific term:

- 1 Electric Vehicle
- 2 Cricket Game
- 3 Fossil Fuel
- 4 Greenhouse

3 Complete the following:

- | | |
|------------|--------|
| 1 decrease | 2 6 |
| 3 hot | 4 less |

4 Correct the underlined words:

- | | |
|-----------|------------|
| 1 dynamo | 2 starts |
| 3 biofuel | 4 turn off |

5 Mention the advantages and disadvantages of solar vehicles:

Advantages

- 1 They don't need fuel.
- 2 They don't need electricity.
- 3 They don't cause climate changes.
- 4 They are light in weight.

Disadvantage

The amount of energy it gets from the sun is smaller than what it gets from gasoline or electricity.

6 What is the importance of:

- It is used by construction workers to knock down parts of buildings.

Device

Flashlight

Solar heater

Fireplace

Model Exam

10

Choose the correct answer:

- 1 b
2 c
3 b
4 b

Write the scientific term:

- 1 Renewable Source of Energy
2 Heat Energy
3 Seatbelt
4 Kinetic Energy

Complete the following:

- 1 Wrecking ball
2 huge wires
3 rotates
4 Petroleum – natural gas – coal

Correct the underlined words:

- 1 Electric cars
2 disappears
3 Ethanol
4 fossil fuel

Complete the following table:

Device	Source of energy	Source of Energy Kind
Flashlight	Chemical energy	Non-renewable
Solar heater	Solar energy	Renewable
Fireplace	Coal	Non-renewable

6 Compare between:

P.O.C.	Biofuel	Fossil Fuel
Its type	Renewable	Non-renewable
Importance	1. Lighting houses 2. Warming houses 3. Cooking 4. Operating cars	It is a renewable source of energy.
Disadvantages	It causes: 1. Air pollution. 2. Global warming.	To get it, it requires: 1. Cutting trees 2. Removal of forests.
Examples	1. Petroleum 2. Natural gas 3. Benzene 4. Coal	1. Wood 2. Grass 3. Corn 4. Wood chips